Hudgens, an expert geologist. Reconsideration of all grounds of rejection is respectfully requested.

The present invention relates to an improved acoustical tile composition in which the conventional starch binder is replaced, in whole or in part, with a wet-strength resin. (See Specification page 5). This provides an acoustical tile composition that may be dewatered more effectively and dried more efficiently than that comparable acoustical tile composition that uses a conventional starch binder. The improved drying allows therefore the acoustical tile composition made with the polyamine epichlorohydrin resin binder to be produced more economically. (See specification page 7).

Claim 1 is the only independent claim. Claim 1 defines the binder as "consisting of up to 7.5% by weight of a reactive water-soluble epichlorohydrin polymer binder and from 0 to 8% by weight of starch." Thus the binder defined by claim 1 must contain the wet-strength resin and it may contain some starch, but nothing else.

The components of the acoustical tile composition, other than the binder, are more or less conventional components. Accordingly, claim 1 defines those components using the term "comprising."

US Patent 4,549,931 to Adamowicz et al is the primary reference cited In the Office Action of March 18, 2003. The Adamowicz et al patent is directed to Inorganic Binders that are based on "two basic materials" namely (a) a lithium and/or sodium water-swelling mica and (b) a source of organic polycations (See

Col. 5, lines 44-53). The "reactive water-soluble epichlorohydrin polymer binder " required by applicant's claim 1 is similar to the "source of organic polycations" described by Adamowicz et al, but the "lithium and/or sodium water-swelling mica" described by Adamowicz et al is excluded from the binder defined by applicant's claim 1.

The Declaration of Bruce A. Hudgens reports on his review of the Adamowicz et al and his review of US Patent 4,239,519 that is cited in the Adamowicz et al patent for a more complete explanation of the preparation of "lithium and/or sodium water-swelling mica." The Declaration describes the raw materials used to make the water-swelling mica and the methods for preparing the water-swelling mica described by Patent 4,239,519 and the Adamowicz et al et al patent.

Basically, the starting materials (fluorhectorite, hydroxyl hectorite, boron fluorophlogopite, hydroxyl boron phlogopite) are heated and cooled in a prescribed manner. The thermal treatment creates a glass-ceramic material that is placed in a polar liquid (e.g. water) and allowed to swell until it shatters into small particles. The small particles swell and form the gel. The gel and various fillers are molded into the desired shape, the shape is subjected to a salt solution containing large cations. The large cations replace the smaller lithium or sodium cations giving dimensional stability to the shape.

The Declaration concludes (Paragraph 9) that the "lithium and/or sodium water-swelling mica" inorganic gel described by US Patent 4,239,519 or

Adamowicz et al would not function as a filler in acoustical tiles, but it would function as a binder. Such a binder would be completely unlike the binder described in Application Serial No 09/718,755.

In the Office Action, the Examiner notes that mica is well known as a filler. Mica is specified as one of several inorganic fillers that may be used in applicant's composition (See page 12, line 8). The Declaration also concludes (Paragraph 10) that the Adamowicz et al patent does not suggest that conventional mica, with no thermal treatment, should be used as a filler in acoustical tiles or that conventional mica should be used for any other purpose. Moreover, the Adamowicz et al patent does not suggest using a "lithium and/or sodium water-swelling mica" as a filler in acoustical tiles.

It is submitted that the Declaration supports applicant's position that Adamowicz et al fails to make obvious applicant's claims because Adamowicz et al describes a two-component binder. Applicant claims a one-component binder. It would not be obvious to omit the main component (i.e. "lithium and/or sodium water-swelling mica") required by the Adamowicz et al binder to produce an acoustical tile. Adamowicz et al does not suggest the use of "lithium and/or sodium water-swelling mica" as a filler and the Declaration explains that the "lithium and/or sodium water-swelling mica" would not function as a filler. Accordingly it is submitted that the rejection of applicant's claims as being obvious under 35 USC § 103 based on US Patent 4,549,931 to Adamowicz et al in view of the secondary references is in error and should be withdrawn.

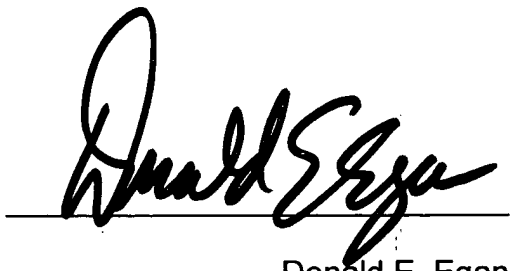
All of applicant's claims are directed to compositions suitable for making acoustical tiles in a water felting-process. Claim 8 specifically requires the composition to include a retention aid that promotes the aggregation of the water-soluble binder. In the Office Action, the Examiner cited US Patent, 5,395,571 to Symons to show that CMC is a well-known thickening agent that the Examiner asserted could be used as a retention aid. The Symons patent is directed to a composition for a foamed building board consisting primarily of calcium hemihydrate (i.e., stucco), a thermosetting resin, foam and other minor ingredients. Symons does not use a water-felting process to make the foamed building board. In fact, the production of the Symons foamed building board does not involve any dewatering step. Accordingly, Symons has no need for a "a retention aid that promotes the aggregation of the water-soluble binder." Symons uses of sodium carboxymethyl cellulose as a retarder to slow down the hydration reaction that causes calcium hemihydrate to set.

Symons does not cite the use of the sodium carboxymethyl cellulose as a thickener or as a retention aid. Moreover, those skilled in the art would not use any thickening agent in a composition used in a water-felting process because a thickening agent would clearly interfere with dewatering process. Thus, the Symons patent, 5,395,571 relates to a building board that is totally unrelated to applicant's invention

It is submitted that all of the claims in issue are patentable over the prior art. Reconsideration of all grounds of rejection is respectfully requested in the

light of the Declaration and the foregoing remarks and an early Notice of Allowance is solicited.

Respectfully submitted,



Donald E. Egan
Registration No. 19,691
273 Stonegate Road
Clarendon Hills, Illinois 60514
(630) 920-8440

June 13, 2003